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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,437	07/17/2003	Tae-Jin Lee	Q74364	1109
23373 7590 05/11/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER SOL, ANTHONY M	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 05/11/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/620,437

Applicant(s)

LEE ET AL.

Examiner

Anthony Sol

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 9 is/are rejected.
- 7) ☒ Claim(s) 2-8 and 10-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Pub. US 2003/0108005 A1 ("Agrawal").

- Regarding claims 1 and 9,

Agrawal discloses a wireless communication system (para. 11, *Bluetooth*) comprising a queue information search unit (fig. 3, *Priority Determination Circuit 37*) for searching a queue-status information provided to a data in a packet unit (para. 24, *the sequence in which to reactivate such channels may be determined by the **relative size of the content of the packets in the associated buffers**, with the largest content being released first*)

Agrawal further discloses a communication priority decision unit (fig. 3, *Priority Determination Circuit 37*) for deciding a communication priority of a plurality of external devices based on the queue-status information as searched, giving a higher priority to an external device having a greatest number of packets in queues (para. 24, *the determination circuit 37 may direct the selector 33 to **sequentially remove the muting***

***signal from the muted radio modules 22 and 23 in accordance with the relative sizes...of the packet content stored in the associated collision buffers 42 and 43).***

Agrawal still further discloses a communication initiation unit (fig. 3, *Channel Selector 33*) for initiating a communication with the plurality of external devices (fig. 1, *Radio Modules 14-16*) according to the communication priority as decided (para. 20, *the selector 33 converts the marker into a muting signal for the future time slot(s) represented by the marker and routes the generated muting signal to all but one of a plurality of outputs that are equal in number to the number of radio modules associated with the terminal 10. For the three-channel embodiment assumed in this description, such outputs are indicated at 34, 35, and 36 in FIG. 3.*

### ***Allowable Subject Matter***

3. Claims 2-8 and 10-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 2 and 10,

The prior art of record does not teach or fairly suggest a method, apparatus, or system comprising a comparator for comparing a first counter value of a first external

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device that corresponds to a transmitted data with a second counter value of a second external device that has a maximum counter value, wherein when a counter value difference between the first external device and the second external device is smaller than a predetermined threshold, the communication initiation unit initiates communication with the third external device which has a highest communication priority.

Regarding claims 7 and 15,

The prior art of record does not teach or fairly suggest a method, apparatus, or system a counter for counting a number of times that the communication is initiated for each of the plurality of the external devices, and a comparator for comparing a first counter value of a first external device corresponding to a transmitted data with a second counter value of a second external device having a maximum counter value, wherein when a difference between the first counter value and the second counter value is greater than a predetermined threshold, the communication initiation unit initiates communication with the first external device.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Benveniste (US7136361B2) teaches hybrid coordination function (HCF) access through tiered contention and overlapped wireless cell mitigation.

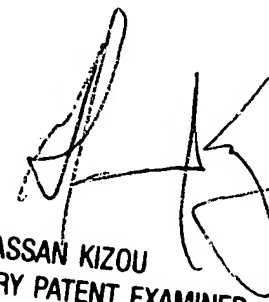
- El Batt (US7054936B2) teaches priority-based dynamic resource allocation for supply-demand systems.
- Liang (US2005/0239474A9) teaches collaborative mechanisms of enhanced coexistence of collocated wireless networks.
- Souissi (US6920171B2) teaches multiple access frequency hopping network with interference anticipation.
- Kowalski (US2003/0223365A1) teaches class of dynamic programming schedulers.
- Liu (US2003/0145095A1) teaches implementing enhanced distributed coordination function (EDCF) with a single hardware backoff counter.
- Kandala (US2005/0174973A1) teaches controlling wireless LAN bandwidth allocation.
- Silva (US2004/0224637A1) teaches directed wireless communication.
- Haartsen (US2002/0167961A1) teaches dynamic bandwidth allocation in ad hoc wireless piconets.
- Van der Tuijn (US6683886B1) teaches prioritizing order of Bluetooth communications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Sol whose telephone number is (571) 272-5949. The examiner can normally be reached on M-F 7:30am - 4pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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5/8/2007